

## **Environmental Studies Program: Ongoing Study**

**Study Area(s):** Western, Central, and Eastern Gulf of Mexico

**Administered By:** Gulf of Mexico OCS Region

**Title:** Gulf of Mexico Marine Assessment Program for Protected Species (GOMMAPPS): Marine Cadastre Planning Tool and Outreach Support (GM-16-09a)

**BOEM Information Need(s) to be Addressed:** Results from the GoMMAPPS study will provide improved information on living marine resource abundance, distribution, habitat use, and behavior in the Gulf of Mexico which is needed to properly mitigate and monitor for potential impacts of human activities, including those related to the oil and gas industry. The overarching goal of this Interagency Agreement is to provide tools in support of the GoMMAPPS study as it develops a comprehensive assessment of marine mammal, marine turtle, and seabird abundance and spatial distribution in the Gulf of Mexico. The geospatial services provided will support planning and information dissemination for the study to inform development of survey design, facilitate involvement across multiple stakeholders, and improve discovery of and access to data and study products.

**Total BOEM Cost:** \$300,000

**Period of Performance:** FY 2016–2019

**Conducting Organization(s):** NOAA Southeast Fisheries Science Center

**Principal Investigator(s):** Name and e-mail

**BOEM Contact(s):** Nicole Charpentier ([nicole.charpentier@boem.gov](mailto:nicole.charpentier@boem.gov))

### **Description:**

**Background:** Better information is needed on living marine resource abundance, distribution, habitat use, and behavior in the Gulf of Mexico to properly mitigate and monitor for potential impacts of human activities. The Gulf of Mexico is a heavily utilized and industrialized basin, supporting oil and gas exploration and development, commercial and recreational fishing, shipping, military operations, and tourism. Numerous workshops in the wake of the Deepwater Horizon oil spill have underscored the need for new baseline information and expanded environmental monitoring, including for marine mammals, sea turtles, and seabirds in the Gulf of Mexico. Given the highly migratory nature of many protected species in the Gulf, the scientific community has recommended a “Gulf-wide” approach, whenever possible, which considers the entire Large Marine Ecosystem (LME).

To fill these gaps, the Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) is modeled after the successful Atlantic Marine Assessment Program for Protected Species (AMAPPS), now in its 2nd phase (AMAPPS-II). Initiated in 2010 as a collaboration among BOEM, NOAA, the U. S. Fish and Wildlife Service, and the U. S. Navy, the AMAPPS focuses on collecting seasonal data on the abundance, distribution,

and behavior of marine mammals, sea turtles, and seabirds throughout the U. S. Atlantic Economic Exclusion Zone (EEZ), providing spatially-explicit information to inform governmental decision makers with mandated responsibilities to protect living marine resources. Using current habitat utilization models, the AMAPPS is generating seasonal density maps of various species to inform stock assessments and as a tool for decision makers concerned with possible adverse impacts from offshore energy development, military readiness exercises, and other activities.

Marine spatial planning and educational tools will play an important role in facilitating stakeholder engagement with the evolving GoMMAPPS program, given the numerous parties that have interest in the development and success of the study. Such tools will help ensure that GoMMAPPS is well coordinated with the developing Gulf restoration programs in coastal and marine waters. An assessment of historical datasets and previous surveys in the Gulf will help inform optimal survey design and coordination across agencies in determining methodology. Geospatial data and mapping support services will serve the purpose of facilitating discovery of and accessibility to datasets collected under GoMMAPPS during its upcoming multi-year field survey effort, as well as to related data analyses and model products.

**Objectives:** Provide education and outreach tools in support of the GoMMAPPS study as it develops a comprehensive assessment of marine mammal, marine turtle, and seabird abundance and spatial distribution in the Gulf of Mexico. The geospatial services provided will support planning and information dissemination for the study to inform development of survey design, facilitate involvement across multiple stakeholders, and improve discovery of and access to data and study products.

**Methods:** Collaboration via data sharing with other related observational efforts in the Gulf will be sought and delivered to project managers to better identify data gaps and adapt surveys accordingly. Planning and coordination meetings will be held with project managers of the marine mammal, sea turtle, and seabird working groups to identify and refine study objectives and data management needs. This study will provide the following:

1. Data inventory and gap assessment
2. Data organization structure and hosting recommendations
3. Plan for how to integrate data and products from GoMMAPPS into MarineCadastre.gov
4. Outreach and Educational Materials, including web maps and story maps

**Current Status:** Contractor presented a rough draft of a story map at the GoMMAPPS workshop on February 5, 2018 during the GOMOSEs conference in New Orleans, Louisiana. Principal Investigators of the ongoing GoMMAPPS project provided feedback to aid in the final draft of the story map which will undergo further review before becoming available to the public. Currently maintaining communication with the COR and Project Managers of the GoMMAPPS study to aid in completion of deliverables.

**Final Report Due:** May, 2019

**Publications Completed:** N/A

**Affiliated WWW Sites:** <https://marinecadastre.gov/epis/#/search/study/100176>;  
<https://www.boem.gov/GOMMAPPS/>.

**Revised Date:** February 15, 2018